Elements of Business Modeling

Sponsored by: ASPE

Presenter: Ramsay Millar
Business Architect
Who is ASPE?

We provide **innovative, custom solutions** to transform your enterprise and increase success within your organization.

We follow the A.C.T. Model

- Assess
- Coach
- Train

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Presenter: Ramsay Millar

Ramsay is an experienced global expert delivering business and technology alignment with demonstrated success by harmonizing complex domains.

Ramsay is a proven mentor, business leader, business architect, enterprise architect, business analyst, project manager and Dev Ops development manager with excellent team building and leadership skills.

Ramsay has demonstrated a highly pragmatic career history of working with leaders in the clouds and with worker bees in the trenches to ensure successful business outcomes for his clients.

Integrate iT

Productivity Methods, Tools, and Training for business agility since 2001
Elements of Business Modeling

- What does success look like?
- Leveraging Knowledge Frameworks
- Why
- What
- How
- Who
- Where
- Knowledge Management Tools
What is a Business Model?

Charles Darwin

"It is neither the strongest or the most intelligent that survive but those species that are able to adapt to change"
“We are a software company disguised as a Bank” - CEO of Citibank

Excerpt from Winning with Software – Watt Humphries

Every organization today is a software company, and the role of the business analyst has never been more important. All stakeholders are demanding better software, delivered faster, and with low tolerance for business outages and security breaches.
Interest in Business Architecture is growing!

What is a Business Architect?

“A business architect provides leadership with strategic alignment of outcomes by defining why, who, what, when, where, and how to improve governance, capability, information, and process gaps. A business architect leverages people skills and business modeling techniques to deliver effective “target” operating models and roadmaps. A business architect works to develop an integrated view of the enterprise using a shared knowledge management framework to ensure transformations, initiatives, and projects align with the strategic business vision.” – Ramsay Millar, Business Architect
Digital Enterprise Alignment

- **Beth Business Lead**
- **Jack CEO**
- **Pat Business Architect**
- **John CIO**
- **Clare BA**
- **Ernest EA**
- **Alan IT Service Manager**
- **Andi Solution Architect**

- **Develop Business Vision**
- **Plan Opportunities and Solutions**
- **Develop Business Architecture**
- **Manage Requirements**
- **Develop Architecture Models**
- **Manage Architecture Change**
Organizations without Business Architects

“We’re smart coders we don’t need business needs, requirements or business analysts to get in our way.

You guys start coding and I'll find out what they want!
"68% of CIOs agree that agile teams require more architects. From defining strategy, to championing requirements to ensuring development teams stick to the rules of the game, the role of the architect is sorely missed in the agile space"

https://www.6point6.co.uk/an-agile-agenda
We need to build Better Business Solutions

- **Vietnam War** – Very high loss of pilots and treasure
  - First time military ran fighter plane using software
- **Banking Industry** – fined $6 million
  - Missed one Process KPI
- **Cruise Ship** – no integrated tools
  - 14 tools to deliver a $1.2 billion software project
- **Telecom Industry** – fined $47 million
  - Their Agile practice did not need requirements to meet SOX Compliance
- **United Kingdom** – $48 billion wasted on failed agile IT projects
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What does success look like?

“Effective enterprise business architecture is critical to organizational survival. Sharing the business model with all stakeholders is an indispensable means to achieving business value for those we serve.”
Operational Excellence

- **Jack Welch, CEO, left GE** the world's most valuable company due to his revolutionary management principles.
- He was Chairman and CEO of General Electric between 1981 and 2001. During his tenure at GE, the company's value rose 4000% by mentoring the manufacturing quality movement.
- Welch transformed GE from a manufacturing to a *service centered business* by embracing change and by creating a *boundary-less organization with a focus on global communication*.
"If you cannot describe what you do as a process, you do not know what you are doing“

W. Edwards Deming, American economist and inspiration of the Total Quality Movement at Toyota, Japan
Customer Value Analysis

The day that Jack Ma, CEO Ali Baba, China was listed on the US Stock Exchange and when he was asked in an interview “What are your most important priorities an in what order” he answered

“My top three priorities are my workers first, my customers second and my share holders third, and that is all I focus on.”
“Sometime in the early 2000s, as Amazon was starting to establish a service-oriented architecture, **Amazon CEO Jeff Bezos** distributed a memo. In it, he mandated that all teams use open API interfaces and web services to share data and functionality.

He made it clear that those not following the rules would be fired.
Digital Enterprise Value Chain

- We need to rethink the role of people, information and technologies to reinvent how you create and deliver digital products and services.
- The Digital Enterprise is a new way of interacting with customers, partners and employees, enabled by technologies that allow you to create new ways of doing business.
- The Digital Enterprise needs to harmonize and orchestrate the following innovations for continual process excellence using these innovative solutions:
  - Rapid revolutionary business models
  - Mobile
  - Cloud
  - Social Media
  - Big data and analytics
  - Semantic Technology
  - Rapid Innovation
Digital Enterprise Value Chain

- **Customer Value Analysis** - The digital enterprise is relentlessly customer centric in its goal to attract, delight and retain customers. This requires understanding the customer journey and predicting their needs to offer the right service and information at the right time via the right channel.

- **Core Competencies** - The digital enterprise provides a contextual, information rich environment for knowledge workers to support their collaboration and decision-making, regardless of location.

- **Process Centric** - The digital enterprise standardizes and automates routine business processes for efficient operations, driven by analytics and intelligent automated decision-making.

- **Operational Excellence** – The digital enterprise encourages constant innovation to drive new business models and maintain a competitive edge and practices excellent portfolio and project management capabilities that ensure rapid execution of business vision.
All initiatives must demonstrably align with the **Management Imperatives**.

![Ronald Ross](image1.jpg)  
**Business Rules**

![John Zachmann](image2.jpg)  
**Enterprise Architecture**

![Roger Burlton](image3.jpg)  
**Business Process Management**

**“The 3 Amigos of Business Architecture”**

**Business Agility Manifesto**

[https://busagilitymanifesto.org/](https://busagilitymanifesto.org/)
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  - Where
  - Knowledge Management Tools
Business models are complex?
The Six Interrogatives

- A business model is a complex system of machines and people
  - using tools
  - organized into departments
  - using sequential processes
  - processing information for services
  - dealing with internal and external stakeholders
  - constrained by policy, business rules, and laws

- Many Viewpoints are required to break down complexity

John A. Zachman”
The Zachman Framework™
Leveraging Knowledge Frameworks

- **Frameworks are necessary to share knowledge.**
  - Letters are building blocks for words
  - Maps for Geography
  - Periodic Table reference model for Chemistry
  - Grey’s Anatomy for Medicine

- **Business Modeling Frameworks**
  - Health Care, Banking, Banking, Insurance, Retail

- **Business Enterprise Architecture Frameworks**
  - Business Architecture Book of Knowledge
  - Business Analysis Book of Knowledge
  - International Requirements Engineering Board
  - Zachmann Framework
Frameworks for Business Architects

- Preliminary
- A. Architecture Vision
- B. Business Architecture
- C. Information Systems Architectures
- D. Technology Architecture
- E. Opportunities and Solutions
- G. Implementation Governance
- H. Architecture Change Management
- F. Migration Planning

- Why?
- What?
- Who? & Where?
- Vision, Strategies & Tactics
- Capabilities
- Customers, Partners & Competitors

- Policies, Rules, Regulations
- Organization
- Information
- Value Streams
- Products & Services
- Metrics & Measures
- Decisions & Events
- Initiatives & Projects

- How?
- When?
- How Well?

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why?
Business Motivation Model (BMM)

- The Why Semantic - OMG BMM OMG UML Business Pattern
How to communicate for success?

TARGET OBJECTIVES

1. INTEGRATION AS A BUSINESS-IT-LEVEL PROCESS VIA THE ON-PREMISES EAGLE, SHOPPER BALANCING, CHARGE REQUESTS, DAILY REPORT INTO SOURCE SYSTEMS WITH ESTABLISHED BUSINESS RULES

2. PROCESS INNOVATION: PROCESSES AND PROCESS EFFICIENCIES (IN-STORE CAIN JOS VS. IN-STORE, METHODOLOGY, END TO END SCHEDULING)

3. DATA MANAGEMENT (DATA ARCHITECTURE TEAM-FOUNDERAL DESIGN PRINCIPLES) INTEGRATION, DATA COMPLIANCE, RISK CHECKING AND REPORTING, CUSTOMER REQUIREMENTS, DATA INTEGRITY, INTEGRATION, SECOND SOURCE DATA INTEGRATION/QUALITY, QUICKTIME: SINGLE SOURCE OF TRUTH RELATIVE TO DATA SET, CENTRALIZED BUSINESS RULES

4. STRATEGIC ASSESSMENT, DATA IMPROVEMENTS, CONTRACT MANAGEMENT, INTEGRATION, PROCESSES, AND METHODS TO ENSURE ACCURATE REVENUE COLLECTION

Target Objective – Improve customer experience

STAKEHOLDER CONCERN STATEMENT

(What is the problem?)

- Not one source of data. Customers have too many modes of communication. Too many screen interfaces.
- Information provided to customers is not timely
- Validating and entering customer input in very manual, changes different customer database and pricing
- Too many changes requests to fix a broken process
- We don’t understand the value to our customer.
- Current systems are not user friendly to our customer.
- We are a little black box. Little transparency to our customer
- Expanding to another customer may have to talk to a number of people and are passed down the line with no overall ownership of their problem.
- Validating at source does not happen (on customer end of entry)

What does success look like?

- Proactive check and balances at source before shippers can ship. Auto reporting to shippers to prompt them for action.
- Will see fewer changes as a result of more timely information.
- Less data to manage because info feeds directly into systems, with less prior approval
- One stop shop for customers saving time for customer and us.
- Single point of contact and ownership of problem tracking
- Customers have more current information
- Validation of customer information during entry into system.

What needs to happen?

- Need to determine what is valuable to customer.
- Map out data that comes and goes to customers.
A structured business vocabulary is a critical part of a business model, through communication it holds together and allows the business to retain business knowledge.

A Concept model builds a business vocabulary that allows you to communicate (talk and write) about operational business facts in a consistent manner. The business vocabulary will support business rules, capability models, process modeling, use cases and requirements....

Capabilities are typically expressed in general and high-level terms and typically require a combination of organization, people, processes, and technology to achieve.

A capability provides semantic traceability across the Business Enterprise.
Capability Heat Mapping

- Provides a clear **line of sight from business to technology**
- A holistic business design produces better aligned enterprise technology planning.
Capability Assessments Align Investments

- Requirements using a common business language
- Heat mapping to reduce redundancy and improve poorly performing capabilities
- Communicate Business and Technology
Process or Capability?

Source: Forester Research

- Start with capabilities to define business transformation needs or to manage alignment of investments to priorities.
- Start with Process Value streams to optimize the business operating model.
- A capability is executed by processes.
- A value stream choreographs business processes.
- Start with business processes to improve one process at a time.
how?
Process Architecture

Digital Retail Customer Value Stream

Try → Buy → Use → Learn → Support → Renew
Who, when, how, and KPI’s

- **Process Scope** is a great way to see what is missing prior to creating BPMN Swimlane modeling.
- **Process Scope** contains roles, events, process, outputs.
- A **process** achieves KPI’s.
- A **process** is supported by services, business services, products and resources.
who?
Stakeholder Analysis

- Stakeholder – A community, individual, team with a direct or indirect interest or concerns relative to the outcomes
- Organization
- Role – A very specific role played by an Actor either human or machine
- Worker – A person with expertise to achieve work deliverables
Stakeholder Needs

NEEDS

\[ \downarrow \]

REQUIREMENTS
Stakeholder Analysis

- Stakeholder Concerns and Needs drive the requirements for change
- Concerns are a great way to learn about problems
- Problems have solutions
- The Who interrogative is a great way to scope a solution.

- **CEO** noted a need to transform legacy systems to a robust cloud service to ensure business continuity.
- **CFO** expressed a need to reduce IT costs and improve business continuity by exploring Cloud Architecture solutions.
- **Order Processing SME** highlighted a concern about customers needing to talk to a number of people and being passed down the line with no overall ownership of their problem, resulting in losing customers.
- **CIO** mentioned a concern about migrating mission-critical systems to the Cloud, noting that business rules and requirements will be lost or missed.
- **CIO** also expressed concern about the lack of a single source of truth due to using 20 fragmented customer databases.
Stakeholder Analysis - example

**Strategic**
- We have a need to transform legacy systems to a robust cloud service to ensure business continuity.
- We have a need to reduce IT costs and improve business continuity by exploring Cloud Architecture solutions.

**Tactical**
- We have a concern that many staff nearing retirement are leaving with business knowledge.

**Operational**
- We have a concern we have no single source of data we use 20 fragmented databases.
- We have concern when migrating mission critical systems to the Cloud that business rules and requirements will be lost or missed.
- We have a concern we have to many change requests to fix a broken process.
- We have a concern we have no single source of truth since we use 20 fragmented customer databases.
- We have a concern our customers need to talk to a number of people and are passed down the line with no overall ownership of their problem.
When

Business Events
### When

#### Business Rules and Decision tables

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<th>Finalized</th>
<th>Priced</th>
<th>Completed</th>
<th>Confirmed</th>
<th>Assembled</th>
<th>Shipped</th>
<th>Received</th>
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</tr>
</tbody>
</table>
where?
Open Geospatial Consortium

- The **OGC Reference Model** describes a framework for the ongoing work of the **Open Geospatial Consortium (OGC)** and their specifications and implementing interoperable solutions and applications for geospatial services, data, and applications. It is not an OGC standard.
- It has the following purposes:
  - Provides a foundation for coordination and understanding (both internal and external to OGC) of ongoing OGC activities and the Technical Baseline;
  - Describes the OGC requirements baseline for geospatial interoperability;
  - Describes the OGC architecture framework through a series of non-overlapping viewpoints: including existing and future elements;
  - Regularize the development of domain-specific interoperability architectures by providing examples.
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Knowledge Management Tools
Knowledge Management Tools

- An established discipline since 1991, KM includes courses taught in the fields of business administration, information systems, management, library, and information sciences.

- Knowledge management (KM) is the process of creating, sharing, using and managing the knowledge and information of an enterprise. It refers to a multidisciplinary approach to achieving enterprise objectives by making the best use of knowledge.

- Knowledge management efforts typically focus on enterprise objectives such as improved performance, competitive advantage, innovation, the sharing of lessons learned, integration and continuous improvement.
Single Source of Truth

- Collaborate with many stakeholders
- Store knowledge and re-useable facts
- Manage business and technical complexity
- Trace impacts across many projects
- Re-use promotes continual quality
- Re-use avoids rework
- Re-use saves time
Knowledge Management Tools Checklist

Must support:

- Modeling business transformation and cloud migrations across the Enterprise
- Modeling and text traceability across projects and the enterprise
- Open Standards BPMN, CMN, DMN, MDA, NIEM, TOGAF, UML, REST API Integration
- Security and Change Control
- Robust Relational Databases technology
- Scalability for thousands of users
- A Loyal User Group Community
- Low cost point of entry
What did Henry Ford and Mahatma Ghandi have in common?

Mahatma Ghandi

“If I believe I cannot do something, it makes me incapable of doing it...... But when I believe I can, then I acquire the ability to do it even if I didn't have it in the beginning”

Henry Ford

“Whether you believe you can or whether you believe you can’t. You are right”
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Links and Resources

Featured courses:

Business Analyst Boot Camp
Classroom | Live-Online | Private Onsite
aspetraining.com/analyst

CBAP Certification Prep Boot Camp
Classroom | Live-Online | Private Onsite
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Whitepapers:

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aspetraining.com/bpmn

2017 BA Salary Survey Report
aspetraining.com/survey

Problem Solving Techniques: Key Skills for BAs
aspetraining.com/solving
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